

Abstract

A method and apparatus for enabling an on-line reconfiguration of striped data in a disk array storage device. A replicated copy of the striped logical device is made in parallel with host operations. A logical device with a new configuration is then substituted for access by the host application even before any data is transferred to locations within the newly configured logical device. Independent processes operating in this disk array storage device reconfigure the data transparently to any host operations while accommodating host I/O requests directed to locations in the new configuration.